

## Round LED modules 350mm

### Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Available CCT from 2700K to 6500K and CRI 80, 90



### RdLED CRI 80 Optimum G3.1

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 350mm 4000lm 830 36V Opt G3.1	1010 127 86046	3000	680	4097	4245	34	23	180	80	1200	C
RdLED 350mm 4000lm 840 36V Opt G3.1	1010 127 86146	4000	680	4275	4430	34	23	188	80	1200	C

### RdLED CRI 80 Optimum G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 55946	3000	175	3969	4130	135	24	168	20	300	D
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 56146		700	3969	4130	34	24	168	80	1200	D
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 56046	4000	175	4172	4343	135	24	177	20	300	C
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 56246		700	4172	4343	34	24	177	80	1200	C

### RdLED CRI 90 Optimum G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 350mm 4000lm 927 144V Opt G3	1010 117 68546	2700	200	3567	3697	142	28	125	20	300	E
RdLED 350mm 4000lm 927 36V Opt G3	1010 117 68846		800	3567	3697	36	28	125	80	1200	E
RdLED 350mm 4000lm 930 144V Opt G3	1010 117 68646	3000	200	3831	3971	142	28	135	20	300	E
RdLED 350mm 4000lm 930 36V Opt G3	1010 117 68946		800	3831	3971	36	28	135	80	1200	E
RdLED 350mm 4000lm 940 144V Opt G3	1010 117 68746	4000	200	4095	4245	142	28	144	20	300	D
RdLED 350mm 4000lm 940 36V Opt G3	1010 117 69046		800	4095	4245	36	28	144	80	1200	D

### RdLED CRI 80 Optimum G1

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 350mm 4000lm 827-865 36V Opt G1	1010 127 62546	2700	700	3886	4021	34	24	163	80	1200	D
		6500	700	4203	4348	34	24	176	80	1200	
RdLED 350mm 4000lm 827-865 144V Opt G1	1010 127 62646	2700	175	3886	4021	137	24	163	20	300	D
		6500	175	4203	4348	137	24	176	20	300	

<sup>1</sup>At nominal current and T<sub>p</sub>

<sup>2</sup>At nominal current and 25°C

<sup>3</sup>It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

## Round LED modules 350mm

### Temperature & humidity

Specification item	Unit	Value
Tp	[°C]	45
Tp rated	[°C]	65
Tc	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

Tp - Temperature related to the performance parameters of the LED modules

Tp rated - Maximum operating temperature to which the rated performance characteristics are declared

Tc - Highest permissible value for safe operation

### Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

### Color coordinates

According to CIE 1931

Specification item	CIEx	CIEy
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

### Certificates & standards

Specification item	Compliant
ENEC	Yes
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	No
IP rating	No IP rating

### Lumen maintenance

#### RdLED CRI 80

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	66 000	56 000
	55°C	>72 000	>72 000	>72 000	>72 000	66 000	56 000
	65°C	>72 000	>72 000	>72 000	>72 000	64 000	55 000
	75°C	>72 000	>72 000	>72 000	>72 000	63 000	53 000
	85°C	>72 000	>72 000	>72 000	>72 000	61 000	53 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	55°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	65°C	>72 000	>72 000	>72 000	>72 000	48 000	37 000
	75°C	>72 000	>72 000	>72 000	>72 000	45 000	35 000
	85°C	>72 000	>72 000	>72 000	69 000	43 000	34 000

reported data based on LM80 LED data (@65mA 17000h / @160mA & 200mA 12000h)

#### RdLED CRI 90

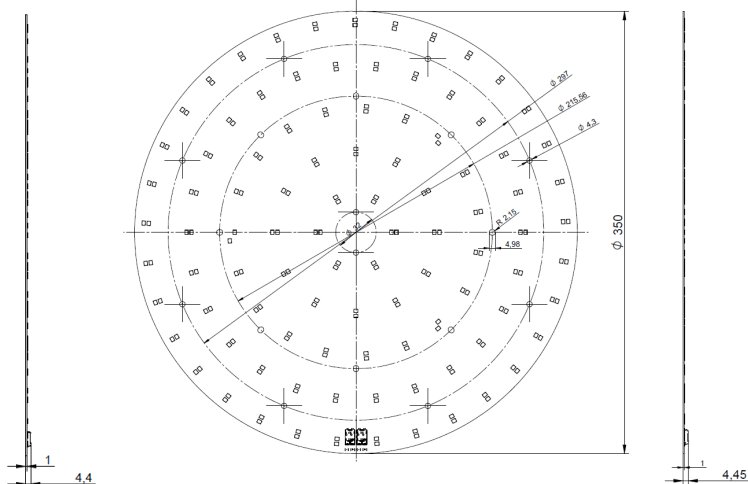
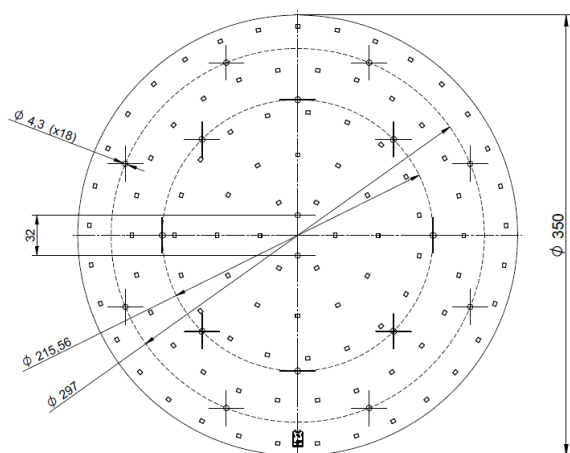
Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60 000	>60 000	>60 000	>60 000	52 000	50 000
	65°C	>60 000	>60 000	>60 000	>60 000	42 000	41 000
If max	45°C	>60 000	>60 000	>60 000	>60 000	34 000	30 000
	65°C	>60 000	>60 000	52 000	49 000	29 000	28 000
	45°C	>60 000	>60 000	47 000	44 000	25 000	24 000
	85°C	>60 000	58 000	41 000	38 000	22 000	19 000

reported data based on LM80 LED data 10 000h

## Round LED modules 350mm

### Dimensions

TW version



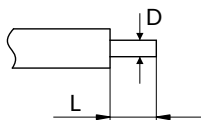
### Mounting

LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

### Wiring

Wire cross section and strip length:



D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm <sup>2</sup>	0.75mm <sup>2</sup>
	AWG 24	AWG 18

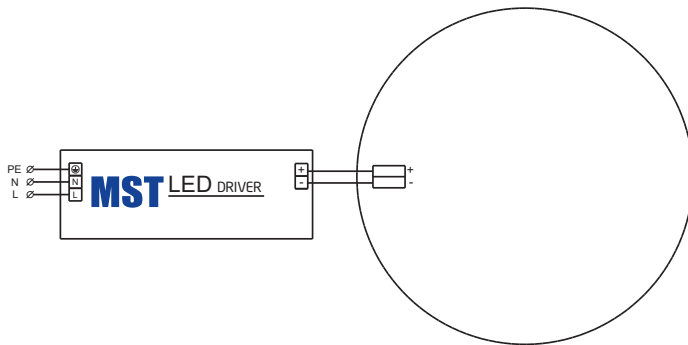
L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:

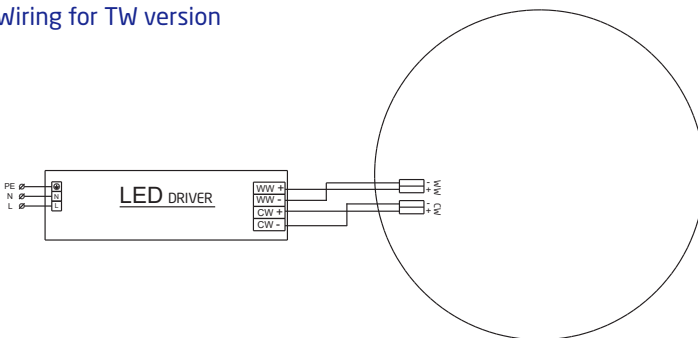


## Round LED modules 350mm

### Connections



### Wiring for TW version



### Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

### Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 350mm 4000lm 830 36V Opt G3.1	1010 127 86046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G3.1	1010 127 86146	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 55946	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 56146	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 56046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 56246	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827 144V Opt G3	1010 117 68546	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827 36V Opt G3	1010 117 68846	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 68646	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 68946	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 68746	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 69046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827-865 36V Opt G1	1010 127 62546	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827-865 144V Opt G1	1010 127 62646	12	1008	363 x 363 x 58